



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

000001

EPA Region 5 Records Ctr.



218698

REPLY TO THE ATTENTION OF

MEMORANDUM

APR 8 2004

SUBJECT: ACTION MEMORANDUM - Request for an Emergency Removal Action at the Gilberts/Kedzie Site located in Gilberts, Kane County, Illinois (Site ID #B58R)

FROM: Mike W. Ribordy, On-Scene Coordinator
Emergency Response Branch - Section 2

THRU: Michael Harris, Acting Chief
Emergency Response Branch - Section 2

TO: William J. Bolen, Acting Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to request and document your approval to expend \$30,000 in order to mitigate immediate threats to public health, welfare, and the environment at the Gilberts/Kedzie Site (Site) within the Village of Gilberts, Kane County, Illinois, and to document your verbal approval of a \$25,000 response cost ceiling initiated by Thomas Cook, On-Scene Coordinator (OSC), Emergency Response Branch, on April 1, 2004. This response action is necessary to mitigate the imminent and substantial threat to public health, welfare, and the environment posed by the presence of elevated levels of lead in soils (both at the surface and at depth) at the Site.

This emergency response action was conducted pursuant to section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9604(a)(1), as amended. This removal action, consisting of securing the Site, is considered an emergency response due to the presence of lead at levels as high as 225,920 parts per million (ppm). This continued presence of exposed lead at the surface in bare soils threatens the health and welfare of local populations, particularly children, who use the Site for recreational purposes including biking, riding all-terrain vehicles (ATVs), snowmobiling, and hiking. Fencing of the Site began on April 1, 2004, and was completed on April 7, 2004.

The Site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #B58R

A. Physical Location and Description

The Site is located between the Chicago and Northwestern Railway tracks and Gallagin Road, in the Village of Gilberts, Kane County, Illinois. The geographical coordinates for the Site are Latitude: 42°06'29" N and Longitude: 88°22'34" W. The area of lead contamination is located on approximately 4 acres of a 22 acre parcel.

B. Environmental Justice Analysis

According to the Region 5 Superfund Environmental Justice Analysis for Illinois, the low income percentage is 27% or greater and the minority percentage is 32%. To meet the Environmental Justice (EJ) concern criteria, the area within one mile of the Site must have a population that is twice the state low income and/or twice the state minority percentage. That is, the area must be at least 54% low income and/or 64% minority. There are approximately 826 people who live within one mile of the Site. The minority population is 4% and the low income population is 3%. Therefore, this Site does not meet the Region's EJ criteria based on demographics as identified in Region 5's "Interim Guidelines for Identifying and Addressing a Potential EJ Case", June, 1998.

C. Site Description and Background

Based on information provided to the United States Environmental Protection Agency (U.S. EPA) from the Illinois Environmental Protection Agency (Illinois EPA), the Site was originally utilized as a tile manufacturing plant. Clay deposits located on-site were excavated and the clay used for the production of tile. After tile operations ceased, the Site was utilized for battery cracking/lead recycling from at least 1968 to at least 1978. The battery salvage operator reportedly cracked batteries on-site. These battery casings were discarded into the open pits which were originally dug to collect the clay. It has also been reported that the pits were used as municipal waste receptacles.

On October 21, 2003, a below ground surface fire occurred at the Site. U.S. EPA responded to the fire at the request of the Illinois EPA and local fire officials. U.S. EPA's Emergency Response personnel and the Superfund Technical Assistance and Response Team (START) mobilized to the site to provide air monitoring and sampling assistance to the local Fire Department.

As a result of this fire, on December 3, 2003, the Illinois EPA conducted groundwater and soil sampling at or near the Site. Groundwater samples were taken from two private wells on neighboring properties. Soil samples were taken from the area of broken lead acid batteries, the area of the fire, and from the sediment in the pond on Site. Final soil sampling analytical results from the sample collected on December 3, 2003 from the battery casing area at the Site, revealed a 110,000 parts per million ("ppm") total lead concentration, with a concentration of 520 ppm pursuant to the Toxic Characteristic Leaching Procedure ("TCLP"). The final soil sampling analytical results collected from the subsurface fire area at the Site also revealed a 2,400 ppm total lead concentration from the sample collected and 9.3 ppm pursuant to the TCLP. No elevated lead levels were found in the two private wells.

On March 10-11, 2004, the Illinois EPA collected approximately 150 soil samples from the Site. The samples were analyzed using a field-based X-Ray Fluorescence Spectrum Analyzer. The results indicate that significant levels of lead are present at the Site. The maximum level of lead detected was 225,920 ppm, with approximately 40 locations having total lead concentrations above 10,000 ppm.

On March 15, 2004, the Illinois EPA referred the Site to U.S. EPA to conduct a time-critical removal assessment and an emergency removal action to help control access to the Site and/or abate the immediate hazards at the Site.

On March 26, 2004, U.S. EPA conducted a Site inspection to evaluate the need for a removal action. The site is located in a mixed residential/commercial area. Approximately 58 homes are located near the Site. The area of contamination is devoid of most vegetation and is littered with cracked battery casings. There is also an area of burned debris from a fire. Numerous trails lead to the area of contamination. The trails are used by area children for biking, hiking, and riding all-terrain vehicles (ATVs). The main trail has markers designating its location. It appears this trail links up with a network of trails which could expand the number of people who may come into contact with the area of contamination. The State sampling data indicates that lead contamination is likely being spread along the trails by the ATVs. The caution tape, which had previously surrounded the area of contamination, was missing in most areas. Talking with area residents and Village officials, it appears the area is extensively used during warmer weather. A tree fort is located approximately 25 yards from the area of contamination. A wetland area and small pond are also located immediately adjacent to the

area of contamination and could be susceptible to off-site migration of the lead containing material. An emergency removal action was determined necessary to mitigate immediate threats to public health, welfare, and the environment due to the elevated levels of lead in the surface soils and the accessibility of the property to the public.

On March 30, 2004, U.S. EPA began preparations for installing a chainlink fence around the area of contamination. On April 1, 2004, the acting Emergency Response Branch Chief verbally approved a \$25,000 ceiling for the Emergency and Rapid Response Services (ERRS) contractor to initiate the removal action. The ERRS contractor mobilized to the Site the same day and began installation of the chainlink fence. The fence was completed on April 7, 2004.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions present at the Site constitute an imminent and substantial threat to the public health, or welfare, and the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 CFR Part 300. These factors include, but are not limited to, the following:

- 1) *Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;*

The Gilberts/Kedzie Site is situated in a mixed residential and commercial area. The area of contamination is unfenced, uncontrolled, and readily accessible by human and animal populations. The Site is bordered to the immediate south by a residential neighborhood. The Illinois EPA and U.S. EPA have observed vehicle tracks in the contaminated areas. Analytical results indicate that surface soils at the Site contain extremely elevated levels of both total (up to 225,920 ppm) and TCLP lead (up to 520 mg/l). Lead has been designated a hazardous substance pursuant to Section 102(a) of CERCLA, 42 U.S.C. 9620(a). The Resource Conservation and Recovery Act ("RCRA") hazardous waste standard for lead is 5.0 ppm pursuant to the TCLP (D008 characteristic waste).

The effects of lead exposure are more severe for young children and the developing fetus through exposure to a pregnant woman. The harmful effects of lead included premature births, lower birth weight, decreased mental ability in the infant, learning

difficulties, and reduced growth in young children. In adults, lead increases blood pressure, induces anemia as a result of the inhibition of hemoglobin synthesis, decreases reaction time, affects memory, and damages the male reproductive system. Lead is also considered by U.S. EPA to be a class B2 or probable human carcinogen. Reference: ATSDR. 1993. Toxicological Profile for Lead. Agency for Toxic Substances and Disease Registry, Division of Toxicology. Atlanta, GA. U.S. Department of Health and Human Services, Public Health Service.

- 2) *High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;*

Analytical results of soil samples collected at the Gilberts/Kedzie Site have indicated the presence of elevated levels of lead at or near the surface. Total lead levels in particular have been documented with a maximum detected level of 225,920 ppm, and approximately 40 locations with concentrations above 10,000 ppm. The majority of the elevated lead levels have been detected in the surface soils, and the lead contamination is prevalent across approximately 4 acres of the 22 acre parcel. Some of the surface samples collected indicate that the levels of TCLP lead present in the waste and surrounding soils exceed the RCRA regulatory limit of 5 mg/L. Some areas across the Site have little or no vegetative cover, which increases the potential for the lead contaminated soils to migrate off-site. There are no controls in place to prevent migration of these hazardous substances, nor is there anything to deter humans or animals from tracking surficial contaminants off-site. Numerous human receptors are located within a mile of the Site. Trespassing has been documented at the Site in the past, and the presence of the contaminated soils at the surface increases the potential for off-site migration of these contaminants as a result of any trespassing activities. The State sampling data appears to confirm that lead contamination is being spread along the trails by trespassing activities.

- 3) *Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;*

In the summer months, this area of Illinois is subject to periods of arid weather and moderately high temperatures. This condition of warm, dry periods can cause soils at the Site to become dust-like and migrate with the wind and impact the surrounding properties.

Large rain or snow melt events, coupled with inadequate vegetative cover, could result in the off-site migration of the contaminated surface soils at the Site.

- 4) *The availability of other appropriate Federal or State response mechanisms to respond to the release;*

In a letter dated March 15, 2004, the Illinois EPA formally requested U.S. EPA's assistance in conducting a time critical removal assessment and possible removal action at the Gilberts/Kedzie Site. The Illinois EPA has indicated they do not have the resources to conduct the required removal.

IV. ENDANGERMENT DETERMINATION

Present at the Gilberts/Kedzie Site are elevated concentrations of lead in surface and subsurface soils. Lead is present at a concentration that U.S. EPA has determined to pose a threat to human health and the environment. Until addressed, the lead contaminated soils present at the Site pose potential inhalation, ingestion and direct contact hazards to surrounding residents in this residential and commercial area. In addition, contaminated soils may be migrating and impacting surrounding areas including an adjacent wetland.

Given the Site conditions, the nature of the suspected hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The purpose of this emergency removal action was to mitigate the immediate threats to the public health, welfare, or the environment from the potential inhalation, ingestion and direct contact hazards posed by the presence of elevated levels of lead in surface soils.

The following actions were taken to mitigate the immediate threats posed by the presence of the hazardous substances in surface soils at the Site. This list is not intended to be a final determination of activities necessary for a complete Site remediation. Specifically, the following activities were performed:

- 1) Development and implementation of a Site Health and Safety plan;
- 2) Restricting access to the hazardous substances on Site by constructing a chain link fence surrounding those areas of the Site with total lead concentrations at or above 1,000 ppm. The fence will remain in place until the soil contamination is adequately addressed.

This removal action was conducted in a manner not inconsistent with the NCP.

The activities described in this memorandum required six on-site working days to complete. The detailed cleanup contractor cost estimate is presented in Attachment 1 and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

<u>Regional Removal Allowance Costs:</u>	\$ 25,000
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Total Cleanup Contractor Costs
(This cost category includes estimates for ERRS and subcontractors)

Other Extramural Costs Not Funded from the Regional Allowance:

None	\$ 0
Subtotal, Extramural Costs	\$ 25,000
Extramural Costs Contingency (20% of Subtotal, Extramural Costs)	<u>\$ 5,000</u>

TOTAL, REMOVAL ACTION PROJECT CEILING	\$ 30,000
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The response actions described in this memorandum directly address the actual or threatened release at the Site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed or non-action at the Site would have increased the potential for area residents to inhale, ingest, or have direct contact exposure to lead contaminated soils. Warning signs posted by Illinois EPA have not acted as a deterrent to individuals wanting to access the Site.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$49,833¹

$$(30,000 + \$5,000) + (42.38\% \times 35,000) = \$ 49,833$$

¹ Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States's right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected emergency removal action for the Gilberts/Kedzie Site, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision was based upon the Administrative Record for the Site. Because the conditions at the Site meet the NCP § 300.415(b)(2) criteria for an emergency removal, I recommend your approval of this removal action. The total project ceiling, if approved, will be \$30,000. Of this amount, an estimated \$30,000 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: _____

Chief, Emergency Response Branch

DATE: _____

4/30/89

DISAPPROVE: _____

Chief, Emergency Response Branch

DATE: _____

Enforcement Addendum**Attachments**

1. Detailed Cleanup Contractor Cost Estimate/Independent Government Cost Estimate
2. Administrative Record Index
3. Region 5 EJ Analysis

cc: R. Worley, U.S. EPA, 5203-G
M. Chezik, U.S. DOI, w/o Enf. Addendum
B. Everetts, Illinois EPA w/o Enf. Addendum

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR COST ESTIMATE

Gilberts/Kedzie Site
Gilberts, Kane County, Illinois
April, 2004

The estimated cleanup contractor costs necessary to complete the removal action at the Site are as follows:

Personnel	\$ 3,500
Equipment	\$ 1,220
Subcontract, Chain-link-fence	\$ 20,000
Total	\$ 24,720



ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD INDEX FOR GILBERTS/KEDZIE SITE GILBERTS, KANE COUNTY, ILLINOIS

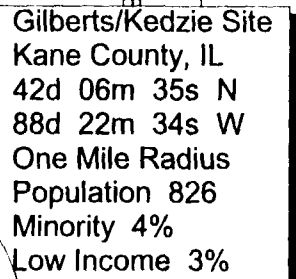
ORIGINAL
APRIL 26, 2004

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	02/00/04	Illinois EPA	Public	Fact Sheet: Illinois EPA Seals Gilberts/Kedzie Property	2
2	03/15/04	Everetts, B., Illinois EPA	Bolen, W., U.S. EPA	Letter re: Illinois EPA's Request for a Time-Critical Removal Assessment at the Gilberts/Kedzie Property w/ Attachments	49
3	03/31/04	Cook, T., U.S. EPA	Range, L., Illinois EPA	Memorandum re: Determination of an Emergency Threat and Need to Perform an Emergency Removal Action at the Gilberts/Kedzie Site	1
4	00/00/00	Ribordy, M., U.S. EPA	Bolen, W., U.S. EPA	Action Memorandum: Request for an Emergency Removal Action at the Gilberts/Kedzie Site (PENDING)	

ATTACHMENT 3

REGION 5 EJ ANALYSIS

Gilberts, IL



Minority: 64% or greater

Low Income: 58% or greater



Source of Map: Census 2000 Database/
ArcView 3.0

INDEPENDENT GOVERNMENT COST ESTIMATE

**GILBERTS/KEDZIE SITE
GILBERTS, KANE COUNTY, ILLINOIS**

APRIL 2004

(REDACTED 1 PAGE)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ENFORCEMENT ADDENDUM
GILBERTS/KEDZIE SITE
GILBERTS, KANE COUNTY, ILLINOIS

APRIL 2004

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

(REDACTED 1 PAGE)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION